

REMARKS

The Final Office Action mailed on August 23, 2005, has been received and reviewed.

Claims 1-15 are currently pending and under consideration in the above-referenced application, each standing rejected.

It is respectfully requested that the above-referenced application be amended as set forth herein, including the addition of new claims 16 and 17.

Reconsideration of the above-referenced application is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-15 stand rejected under 35 U.S.C. § 103(a).

The standard for establishing and maintaining a rejection under 35 U.S.C. § 103(a) is set forth in M.P.E.P. § 706.02(j), which provides:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Yaguchi in View of Kong

Claims 1-13 and 15 stand rejected under 35 U.S.C. § 103(a) for reciting subject matter which is assertedly unpatentable over that taught in PCT Patent Publication WO 97/01865 to Yaguchi et al. (hereinafter "Yaguchi"), in view of teachings from U.S. Patent 5,920,118 to Kong (hereinafter "Kong").

Independent claim 1, as proposed to be amended herein, recites a semiconductor device assembly that includes, among other things, a carrier substrate and a solder mask. The solder mask extends to an outer peripheral edge of a substantially planar structure of the carrier substrate.

It is respectfully submitted that a *prima facie* case of obviousness has not been established against any of claims 1-13 or 15 since neither Yaguchi nor Kong teaches or suggests a semiconductor device assembly with a solder mask that extends to an outer peripheral edge of the substantially planar structure of a carrier substrate. Thus, Yaguchi and Kong, taken either separately or together, do not teach or suggest each and every element of amended independent claim 1.

Claims 2-13 and 15 are each allowable, among other reasons, for depending directly or indirectly from claim 1, which is allowable.

It is also submitted that a *prima facie* case of obviousness has not been established against any of dependent claims 5-8 since one of ordinary skill in the art would not have been motivated to combine teachings from Yaguchi and Kong in such a way as to render the subject matter recited in these claims unpatentable. Specifically, the teachings of Yaguchi relate to use of transfer molding processes to form an encapsulant structure around an entire semiconductor die-leads assembly, whereas the teachings of Kong are directed to an entirely different, only partial encapsulation technique in which an underfill material is introduced between a circuit board and a semiconductor die to fill gaps therebetween as well as to fill an opening in the circuit board. In view of these different encapsulation techniques, it is respectfully submitted that any motivation to combine the teachings of Yaguchi and Kong was improperly derived from the hindsight provided by the disclosure of the above-referenced application.

Yaguchi, Kong, and Matsumura

Claim 14 has been rejected under 35 U.S.C. § 103(a) for reciting subject matter which is purportedly unpatentable over the subject matter taught in Yaguchi, in view of teachings from Kong and, further, in view of the teachings of U.S. Patent 5,181,984 to Matsumura et al. (hereinafter "Matsumura").

Claim 14 is allowable, among other reasons, for depending directly from claim 1, which is allowable.

New Claims

New claims 16 and 17 have been added. New claims 16 and 17 both depend from claim 1. The subject matter recited in these claims is fully supported by the disclosure of the above-referenced application.

Entry of Amendments

It is respectfully requested that the proposed claim amendments be entered. The proposed amendments do not introduce new matter into the application. It is also believed that the revisions to the claims would not require an additional search.

In the event that a decision is made not to enter the proposed claim amendments, entry thereof upon the filing of a Notice of Appeal in the above-referenced application is respectfully requested.

CONCLUSION

It is respectfully submitted that each of claims 1-17 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing allowance of the above-referenced application remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,



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